

**WHAT IS CLAIMED IS:**

1           1.     A computer program product that when executed generates a graphical  
2 user interface on a display device for using a computer to schedule the performance of  
3 service actions, the graphical user interface comprising:

4           a planning board display for scheduling information associated with a period of  
5 time, the scheduling information including:

6                 resource identifiers, each resource identifier representing a resource and  
7 wherein at least one resource identifier represents a human resource and at least  
8 one resource identifier represents a reusable resource, and

9                 unavailability indications, each unavailability indication representing that  
10 a resource represented by one of the resource identifiers is not available to be  
11 scheduled for a portion of the period of time for which the scheduling information  
12 is being displayed; and

13           an alert display for messages associated with the scheduling information  
14 displayed using the planning board display wherein at least one message includes  
15 information associated with a constraint other than a resource constraint.

1           2.     The computer program product of claim 1 wherein at least one resource  
2 identifier represents a non-reusable resource.

1           3.     The computer program product of claim 1 wherein an unavailability  
2 indication for a first resource includes an indication of an association with a second  
3 resource for a particular period of time.

1           4.     The computer program product of claim 3 wherein:  
2 the first resource is a human resource, and  
3 the second resource is a reusable resource.

1           5.     The computer program product of claim 1 wherein:

2           the interface includes a relationship control operable to allow a user to associate a  
3 first resource identifier representing a first resource in the planning board display with a  
4 second resource identifier representing a second resource such that the first resource and  
5 the second resource are associated for a particular period of time, and  
6           the planning board display includes an association indication of the association of  
7 the first resource and the second resource for the particular period of time.

1           6.       The computer program product of claim 1 wherein an unavailability  
2 indication for a resource includes an indication of a period of time in which the resource  
3 is (1) not available and (2) not assigned to a task item.

1           7.       The computer program product of claim 1 wherein the planning board  
2 display comprises a planning board window wherein the display position of the planning  
3 board window on a display device is controllable by a user.

1           8.       The computer program product of claim 1 wherein the planning board  
2 display comprises a planning board pane wherein the display position of the planning  
3 board pane on a display device is fixed.

1           9.       The computer program product of claim 1 wherein the interface comprises  
2 a task display for task items to be scheduled wherein the task items to be scheduled  
3 include at least one task item requiring a human resource and at least one task item  
4 requiring a reusable resource.

1           10.      The computer program product of claim 9 wherein the task display  
2 comprises a hierarchical task display for showing a hierarchy of task identifiers, each task  
3 identifier representing a task item for a service action to be performed.

1           11.      The computer program product of claim 9 wherein the task display  
2 comprises a task display capable of displaying different types of task information for task

3 items, wherein a user identifies types of task information to be displayed for the task  
4 items.

1 12. A computer program product that when executed generates a graphical  
2 user interface on a display device for using a computer to schedule the performance of  
3 service actions that involve activities at multiple locations, the graphical user interface  
4 comprising:

5 a planning board display for scheduling information associated with a period of  
6 time, the scheduling information including:

7 resource identifiers, each resource identifier representing a human  
8 resource and wherein at least one resource identifier represents a field technician  
9 and at least one resource identifier represents a central workshop technician, and

10 unavailability indications, each unavailability indication representing at  
11 least one of the resources represented by one of the resource identifiers is not  
12 available to be scheduled for a portion of the period of time for which the  
13 scheduling information is being displayed;

14 a task display for showing task identifiers, each task identifier representing a task  
15 for a service action to be performed at a specified location, wherein:

16 a first task identifier represents a first task item to be performed at a field  
17 location,

18 a second task identifier represents a second task item to be performed at a  
19 central workshop location that is different from the field location, and

20 the first and second task items are to be completed as part of a service  
21 action; and

22 an alert display for messages associated with the scheduling information  
23 displayed using the planning board display wherein at least one message includes  
24 information associated with a constraint other than a resource constraint,

25 wherein the field technician is associated with the first task item and the central  
26 workshop technician is associated with the second task item.

1 13. The computer program product of claim 12 wherein:

2           the first task item includes a field human resource skill requirement,  
3           the second task item includes a central workshop human resource skill  
4 requirement,  
5           information associated with the resource identifier representing the field  
6 technician includes an indication of a skill possessed by the field technician,  
7           information associated with the resource identifier representing the central  
8 workshop technician includes an indication of a skill possessed by the central workshop  
9 technician,  
10          the field technician is associated with the first task item only when the indication  
11 of the skill possessed by the field technician matches the field human resource skill  
12 requirement of the first task item, and  
13          the central workshop technician is associated with the second task item only when  
14 the indication of the skill possessed by the central workshop technician matches the  
15 central workshop human resource skill requirement of the second task item.